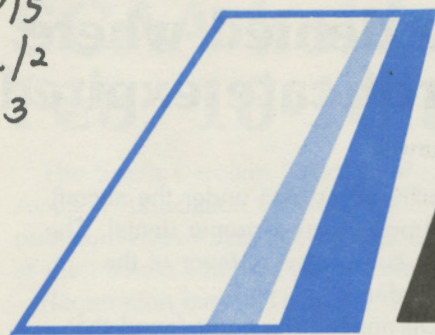


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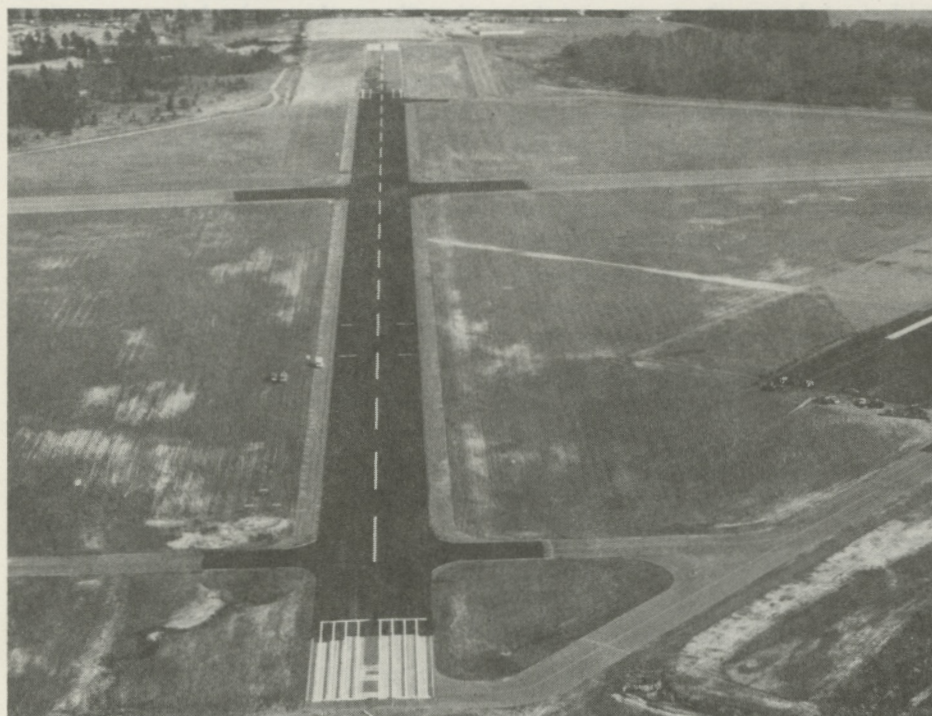
Palmetto AVIATION

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South Carolina Aeronautics Commission

FEBRUARY, 1984



Camden resurfacing completed

FAA chooses Anderson to build FSS facility

South Carolina Congressman Butler Derrick announced recently that the FAA had chosen Anderson as the location for a new fully automated Flight Service Station (FSS).

Expected to be operational by mid-1985, the new FSS will provide state-of-the-art weather dissemination and flight planning services to pilots (see related story, this page).

Other FSS at Florence, Myrtle Beach, Charleston and Greer will eventually be closed and personnel at those facilities will go to Anderson. The Anderson FAA will employ about 80 people and have an annual payroll of \$1 million.

However, Spartanburg officials have protested the decision, citing what they

said were discrepancies in the decision-making process. The U.S. General Accounting Office is looking into the protest and is expected to make recommendations on the dispute by Mid-April.

The FAA evaluated offers from several municipalities, including Spartanburg, Charleston, Greenwood and Greenville, before choosing Anderson.

Joe Bryan, manager of FSS Southern Region real estate office in Atlanta, said Anderson offered the FAA the most attractive offer by offering to build a new facility on the airport and then lease it to the FAA for \$1 a year.

"Anderson was overall the cheapest cost to the government," Bryan said. ➔

Auto FSS is wave of the future

It's 7:00 a.m. in Charleston, S.C. and Bill Reider has to decide in the next few minutes whether he can fly to Clemson for a 1:00 p.m. meeting. Since he's not instrument-rated, the decision depends on the weather — which, at the moment, doesn't look too promising. If it's forecast to stay that way, he'll have to scrub his plans to fly and instead drive the 235 miles to Clemson, in the western part of the state, and that will take him four and a half hours.

So, he sits down at his telephone, dials a number, waits for a signal, places the receiver into a cradle on his home computer and almost immediately a message appears on his monitor letting him know that he is hooked up with the computerized data base for the automated flight service station network.

He types into the computer his pilot certificate number, aircraft identification number, aircraft type, proposed departure and arrival times, intended route of flight, planned air speed and altitude. Within seconds all the information he needs is displayed on his monitor — current and forecast weather, including winds aloft — along his route of flight. He also receives terminal forecasts for Clemson and the status of navigational aids along the way. In addition, his printer provides him a hard copy of the information appearing on the monitor.

Reider decides the trip can be made

Continued p. 7



PALMETTO AVIATION is an official publication of the South Carolina Aeronautics Commission. It is designed to inform members of the aviation community, and others interested in aviation, of local developments in aviation and aviation facilities and to keep readers abreast of national and international trends in aviation.

The Aeronautics Commission is a state agency created in 1935 by the S.C. General Assembly to foster and promote air commerce within the state.

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Aircraft insurance denied where pilot's medical certificate expired

by H.M. Burwell

The North Carolina Court of Appeals recently ruled that the failure of a pilot to maintain a current medical certificate permitted an insurance company to deny coverage of an aircraft damaged while landing at a North Carolina airport. The fact that the lack of the certificate was not the cause of the accident did not influence the court's analysis, *Bellefonte Underwriters Insurance Co. v. Alfa Aviation, Inc.*, 18 Avi 17,447 (1983).

The action had arisen from a single engine aircraft accident that occurred while the pilot was attempting to land the aircraft. The pilot, his employer (lessee), and the aircraft lessor were defendants in a case brought by the injured passengers. The defendants sought insurance coverage and the insurance company filed a declaratory judgement action seeking a ruling that its denial of coverage under an airport

liability policy and under the aircraft hull policy was a proper denial. The trial court ruled in favor of the defendants.

On appeal, the court found that because the pilot's medical certificate expired 8 months before the accident, that "he could not lawfully act as pilot in command" under §61.3 of the Federal Aviation Regulations. Therefore, the pilot was not properly certificated within the meaning of the hull insurance policy. Moreover, the airport liability policy excluded leased aircraft. Consequently, the court ruled that there was no requirement for insurance coverage of the accident under either policy.

Mr. Burwell is an attorney with the firm of BARRINGER, ALLEN, PINNIX & BURWELL in Greenville, S.C.

Pilots can face criminal charges in certain fatal air crashes

An attorney specializing in criminal and civil litigation told the Federal Bar Association's air and space transportation law committee in Washington recently that there are instances in which airmen could be convicted of criminal violations up to and including first degree murder in the events attending an aircraft crash with loss of life.

The session was moderated by Richard Jones, a former Eastern captain and now a senior partner in a Washington law firm. Lillian Mcewen, now a private attorney and a former U.S. attorney, and Harry Almond, a specialist in international law for the National War College, led the discussions.

Among the incidents explored were a fire that killed 14 passengers after a Swissair DC-8 slid off a runway in Athens in which the pilot and copilot were sentenced to prison; a runway overshoot by a TWA 707 in Rome in which 45 passengers died and the pilot was exonerated at the trial of

criminal negligence; and a Turkish Airlines crash in Ankara with 47 deaths in 1983, not yet resolved.

There could be a "growing trend" to try civil pilots as criminals, Jones said. This impacts on air safety because the "danger lies in searching to find fault rather than searching to find the cause of the accident." Also, he said, judges often apply standards relevant to surface mishaps but "not relevant to flight situations where a pilot or air controllers must make instantaneous decisions under stress conditions."

Mcewen pointed out that the pilot whose failure to perform an act or function causes people to die can be convicted of first degree murder and of lesser offenses if proof is available the pilot violated regulations, exhibited reckless conduct or grossly deviated from a standard of conduct. "For most states, the conduct of a pilot would be in the same category as for automobile drivers." ➔

SCAA holds annual meet Feb. 16-18 at Hilton Head

The South Carolina Agricultural Aviation Association will hold its annual convention Feb. 16, 17 and 18 at the Mariner's Inn on Hilton Head.

Registration begins Thursday, Feb. 16 at 11 a.m. The meeting will start at 1:30 p.m. with welcoming remarks from state and federal officials followed by a business meeting until 3 p.m. At 3:30 p.m., Dr. L.H. Senn of the Clemson University plant-pests regulatory service will conduct a program on Boll Weevils.

Friday, the annual refresher course conducted by Dr. Ben Kissam of the

Clemson University Cooperative Extension will be held in the morning. This course is required for all those who wish to operate in the state during the coming year.

Following the morning session, the conference's featured speaker, Sen. T. Ed Garrison, will address the members during the luncheon.

The refresher course will continue Friday afternoon followed by a business meeting and election of officers for the coming year. The convention banquet will be Friday evening.

Saturday, Feb. 18, will be available for a business meeting. ➔

Breakfast Club



The S.C. Breakfast Club met at Corporate Airport Jan. 29 for what president Jerry Ballard said was one of the largest meetings held recently.

"The weather broke good...we filled the whole place with wall to wall airplanes." Ballard said there were 124 people and 54 airplanes at the meeting. The farthest town represented was Gastonia, N.C.

Pelion mayor Elsie Stuart Rast said the breakfast clubbers consumed 25 dozen scrambled eggs, 25 pounds of Saluda Country whole hog sausage, many pounds of yellow grits, cheese, orange juice, and over 300 cups of coffee.

The breakfast was sponsored by the Pelion Ruritan Club, Frank Stover, president. The chief cook was Charlie Haggard.

Other Breakfast Club meetings through June 3 are as follows:

- Feb. 26** **Grand Strand**
North Myrtle Beach
- Mar. 11** **Berkeley County,**
Moncks Corner
- Mar. 25** **Anderson County,**
Anderson
- Apr. 8** **Huggins Airport,**
Timmonsville
- Apr. 22** **EASTER SUNDAY**
No meeting
- May 6** **Darlington County,**
Darlington
- May 20** **Daniel Field**
Augusta, GA
- * June 3** **House Movers Field,**
Batesburg

*(not on current chart, see sectional)

project applications since Jan. 1, 1984 will receive completed new applications for their signature. We apologize if this creates any inconvenience.

For further information call or write Wayne Corley at the South Carolina Aeronautics Commission, PO Drawer 1987, Columbia, SC 29202. Telephone is 758-0128. ➔

Saluda County seeking FBO

The Saluda County Airport Commission is actively seeking a fixed base operator for the airport.

Airport Commission chairman Howard Auston said there are no facilities at present.

"We don't have anything but a runway and a parking apron," he said. But, he added, that someone who was willing to come in and build the airport up could get a "pretty good deal" from the county.

Interested persons can write to Box 247, Rt. 4, Saluda, SC 29138 or call him (evenings only) at 445-3275. ➔

Ross elected secretary to national AAA

Jack Ross, a Darlington County aerial applicator and immediate past president of the S.C. Agricultural Aviation Association, was elected 1984 secretary to the National Agricultural Aviation Association at the December annual convention in Reno, Nevada.

Jack's wife, Marie, was elected treasurer of the Women's National Agricultural Aviation Association at the same meeting. ➔

Plans, specifications needed with project applications

The Aeronautics Commission is endeavoring to assure higher quality control for all airport improvement projects involving state funds. The new applications require the submittal of preliminary and final plans and specifications. Sponsors should also provide qualified resident inspectors and materials testing during construction.

In order to keep our airport files current, "as built" or record drawings

shall be provided to the commission after completion of all construction projects. For planning projects, reproducible of all airport layout plan drawings are needed.

These changes do not represent any shift in past policy but merely provide assurance that the commission can offer better service to sponsors and aviation consultants by having up-to-date information on hand.

Those sponsors having submitted

Florence manager, Carl Nowak caps 40-year FAA career

Carl S. Nowak, Air Traffic Manager of the Florence Flight Service Station, retired from the Federal Aviation Administration Jan. 3 after nearly 40 years of government service.

He began his career in 1947 with the Civil Aeronautics Administration and worked in Brookville, Dubois, Altoona and Johnstown, Pa. and Louisville, Ky. Eleven years ago, he came to Florence as Air Traffic Manager.

He was local coordinator for the Altoona-Johnstown-Dubois area for five years, Louisville, Ky. for two years and — before his retirement — was local coordinator for the Florence-Myrtle Beach-Wilmington area.

Mr. Nowak, his wife and son, Scott, will move back to Erie, Pa. to spend time with their families who live there. ➔



Carl S. Nowak

Defective parachute release rings can deform under heavy loads

PROBLEM: There have been instances reported of the large ring (RW-1) of the 3-ring release system deforming under higher than normal opening loads. Deformation is severe enough to prevent the middle ring (RW-2) from passing through the larger ring when released.

Number Affected: Approximately 2000 RW-1 rings out of an estimated 7,900 batch of rings failed to receive heat treating for hardening. These rings have been shipped from the manufacturer, U.S. Forgcrafft Corporation and have been circulated throughout the parachute industry.

Identification: All RW-1 rings with '82 or '83 date stamping are suspect. There is no visual inspection that will identify a "soft" ring from a "hard" ring.

Testing: There are two methods for testing the rings for hardness or strength:

1. Pull Test - Pull testing each RW-1 ring to 2,500 pounds seems to be the most reliable method of identification of a "soft" ring. The ring should be measured before and after the pull test. Bent or deformed rings should be removed from the harness or the harness removed from service until corrected. .040" deformation is enough to prevent proper release.
2. Rockwell hardness test. This test is performed on a hardness tester using the C scale. Properly treated

rings are certified to between 38 and 40 on the Rockwell hardness C scale. This gives a tensile strength of over 2,500 pounds.

Readings of over 20 have an adequate safety margin for sport use. Readings of 0 to 10 are considered "soft." "Soft" rings which have been pull tested can deform between 1,200 and 1,800 pounds.

Performing this test leaves a small pin hole like indentation in the ring near the RW-1 '82 stamping. "Soft" rings should be removed from service.

Defective Ring Replacement:

An alternate method to assure that the large RW-1 ring is fully certified is to remove the old ring ('82 or '83) and replace it with a new separable RW-1 ring. This method is the most reliable method of being assured the rings comes up to the full strength and hardness standards.

Replacement rings will be available from U.S. Forgcrafft Corporation and/or the Relative Workshop.

Removal of the defective ring can be done with bolt cutters or with a hacksaw. The replacement rings have a separable bar for easy installation on the harness without the need for stitching.

Timing: At this time, new rings are not available. U.S. Forgcrafft Corporation estimates it will be the middle of February, 1984, before separable RW-1 rings will be available.

All new rings being shipped in 1984 will have '84 date markings beside the RW-1 stamping.

Note: This safety notice is intended to keep the jumping public informed and is not intended to be the final word. Please feel free to contact Strong Enterprises, Relative Workshop, or U.S. Forgcrafft Corporation for more detailed information.

Military Units: Military installations should refer to Natick Research Labs, date/time Notice 271330Z, Jan. '84, Safety Use of 3-Ring Release. ➔

Balloon safety seminar planned at Hilton Head

The Second Annual Hot Air Heaven Balloon Safety Seminar will be held Feb. 24, 25 and 26 at Marriott's Hilton Head Resort Hotel, Shipyard Plantation, Hilton Head.

The seminar includes 12 hours of instruction in such topics as preventive maintenance, emergency procedures, tether operation and weather.

The cost is \$30 per person or \$55 per couple and includes a Friday reception and Saturday lunch. The registration deadline is Feb. 20.

Mail application to: HAH Balloon Safety Seminar, 415 E. Huntingdon St., Savannah, GA 31401. For more information contact Tim Hamilton at (912) 233-4561. ➔

Mrs. Johnson, FSDO secretary, retires from FAA Jan. 3

Mrs. Pauline R. Johnson, Aviation Secretary for the Accident Prevention Specialist at the Columbia Flight Standards District Office (FSDO), retired from Federal Service on January 3, 1984. She is affectionately known to her many friends as "Polly."

Mrs. Johnson came to work at the Columbia "GADO" on May 5, 1969, and worked with Frank Kelley as secretary in the accident prevention program. While her primary duties were associated with the accident

prevention program, she performed other important administrative duties with the designated pilot examiner, air taxi, repair station and pilot school programs.

She did an outstanding job while working in the GADO/FSDO and will be remembered not only as an extremely conscientious, efficient and intelligent person, but a truly gracious lady.

Polly, we all miss you!



Pauline R. Johnson

UNICOM changed at Clemson

The UNICOM frequency at Clemson-Oconee airport has been changed to 122.7 effective Feb. 15.

Hanke performs UL aerobatics at Kitty Hawk

Sherman Hanke, a Marlboro County aerial applicator and ultralight dealer, reports that his son Ken put on a fine show during the 80th Anniversary of the Wright Brothers First Flight Celebration.

Ken, piloting a 235-pound Phantom over the Wright Brothers Memorial at Kitty Hawk, N.C., treated the crowd to a series of loops, slow rolls, four-point rolls, Cuban eights, snap rolls, tail slides, hammerheads and inverted pushups to level flight.

Many spectators stopped by to shake hands and congratulate him afterward and he was asked to stand and be recognized at the Banquet.

"We were honored to be asked to perform at such a Historic event and were very pleased to be able to attend and meet and listen to so many distinguished people, all from the field of our love—flying," Hanke said.

Hanke is a dealer for Quickie, Ultralight Flight, Phantom and Diehl Aero-Nautical XTC. ➔

Hickson Skinner, Hawthorne administrator, retires Jan. 31

Hawthorne Aviation has announced that Hickson Skinner, Wholesale Administrator for the Aero Sales Division and a 33-year Hawthorne employee, retired from the company January 31, 1984.

Skinner joined Hawthorne in July of 1951, as a flight instructor at Spence Air Force Base in Moultrie, Ga. He remained in Moultrie for the next ten years, serving as Director of Flight Safety from 1954 to 1961.

With the closing of Spence in 1961, he returned to Hawthorne's home operation in his native Charleston as an aircraft salesman in the Beech Aircraft Division. In 1963 he joined the Piper Sales program.

Since that time, Skinner has served as aircraft salesman, aircraft sales manager, Cheyenne program manager, and has directed Hawthorne's Charleston Safety program. He has been Wholesale Administrator for the past seven years.

"Hickson Skinner has been a loyal member of the Hawthorne team for many years and helped build the company to what it is today. We are all truly indebted to him," said Vernon Strickland, Chairman of the Board of Hawthorne.

Although Mr. Skinner's retirement was effective January 31, he will be retained during February on a consulting basis to provide for a smooth transfer to his duties.

Mr. Skinner and his wife, Margaret, live in the West Ashley section of Charleston. He is an avid sailor and plans to take full advantage of his leisure time in pursuit of that hobby. ➔

Wilke named controller for Hawthorne

Michael B. Wilke has been named Controller for Hawthorne Aviation with responsibility for the company's financial and accounting functions.

Dean Harton, Executive Vice President, said, "We feel that establishment of a controller position will provide for better control and management of the company's financial affairs. We are looking forward to the same management and direction Mr. Wilke has demonstrated in every other position in which he has served."

Mr. Wilke, formerly Hawthorne's Business Manager, joined the company in 1973 at the Fort Huachuca, Arizona location. There he served as Chief Accountant. He moved to the Charleston operation in 1980 and assumed the position of Business Manager in 1981.

Wilke graduated from the Baptist College where he obtained a B.S. in Business Administration with emphasis in accounting. ➔

Locations and times for FAA written tests administered in South Carolina

CHARLESTON AFB

Charleston, S.C.

Tests are administered by appointment only, on the 2nd and 4th Saturday of each month, between the hours of 9:00 a.m. and 3:00 p.m. For appointments, call 744-0116 or 747-8151.

EAGLE AVIATION, INC.

West Columbia, S.C.

Tests are administered to the public on Monday through Friday, between the hours of 8:00 a.m. and 6:00 p.m., and on Saturday and Sunday, by appointment only. For appointments, call 794-8555.

GREENVILLE AVIATION SERVICE, INC.

Greenville, S.C.

Tests are administered by appointment only, each Wednesday and Saturday, between the hours of 8:00 a.m. and 4:00 p.m. For appointment, call 242-4201.

MIDLANDS AVIATION CORPORATION

Columbia, S.C.

Tests are administered to the public by appointment only. For appointment, call 772-3282 or 771-7915.

NORTH AMERICAN INSTITUTE OF AVIATION OF S.C., INC.

Conway, S.C.

Tests are administered, by appointment only, between the hours of 9:00 a.m. and 5:00 p.m. For appointments, call 397-9111.

SOUTH CAROLINA HELICOPTERS, INC.

Saluda, S.C.

Tests are administered to the public on Monday through Friday, during the hours of 9:00 a.m. and 4:45 p.m., and at other times by appointment only. For appointments, call 445-8126.

*All ATP, Aviation Mechanic, and some Flight Engineer tests require authorization from FAA Inspector prior to taking the test.

ALVA HENRY, JR.

Sumter, S.C.

Tests will be administered on the 2nd Saturday each month at the Sumter TEC, Room 401, between the hours of 9:00 a.m. and 5:00 p.m., by appointment only.

Tests will be administered on the 4th Saturday of each month at the Florence Flight Service Station between the hours of 9:00 a.m. and 5:00 p.m., by appointment only. Tests will also be administered at other times, by appointment only, at Shaw AFB. For appointment, call 666-3123 or 775-9146.

BERMUDA HIGH SOARING SCHOOL, INC.

Chester, S.C.

Tests will be administered to the public Tuesday through Sunday, by appointment only. For appointments, call 377-4540 or 377-1168.

FAA designated pilot examiners in S.C.

DAVID ANDERSON, 163 Archers Lane, Columbia, S.C. 29210; 796-7140 Of., 781-6082 Res.; Instr. Rating, R-H, Flight Instructor R-H ATP (R-H)

THOMAS PAUL BALES, P.O. Box 241, Little River, S.C. 29566; 249-4523 Of.; Pvt./Com. (Gliders).

EDWARD S. BAUER, P.O. Box 1499, N. Myrtle Beach, S.C. 29582; 272-5822 Of., 449-5221 Res.; Pvt./Com. Airplanes, IRA, PA-23, 31, 34 & 44 Series, BE-55/58 Series, C-310 Series.

THOMAS EARL BROWN, 104 Caveson Drive, Summerville, S.C. 29483; 871-9110 Of., 871-3025 Res.; Pvt./Com. Airplanes, IRA, PA-23 Series.

LINCOLN DALE GROOM, Route 8, Lakeview Drive, Greenville, S.C. 29611; 877-7119 Of., 269-6811 Res.; Pvt./Com. Hot Air Free Balloons (Limited to lighter-than-air balloons with airborne heaters)

LESTER F. HEMBEL, P.O. Box 636, Saluda, S.C. 29138; 445-8126 Of., 445-7445 Res.; Pvt./Com. (Hel. Only) (Lim. to Hughes & Enstrom) F-I, R-H (VFR Only)

ALVA HENRY, JR., 1067 Nottingham Dr., Sumter, S.C. 29150; 666-3123 Of., 775-9146 Res.; Pvt./Com. Airplanes, IRA, PA-23 Series, C-340, Flight Instructor, A & I, PA-60-601P.

LAWRENCE W. LARSEN, 1507 McKeithan Street, Conway, S.C. 29526; 397-9111 Of.; Pvt./Com./ATP Airplanes, IRA, PA-44, PA-34 & 23 Series, F-I, A & I, Beech BE-55/58 Series, Piper PA-31 Series, (Excluding Turboprop)

ELLWYN L. LAXSON, 118 Pleasant Drive, Greer, S.C. 29651; 879-3239 Res.; Pvt./Com., IRA, PA-34 & 44 Series, Be-76 Series, AC 500 & 600 Series, Except Turboprop. Cessna-401.

FREDERICK H. MacFAWN, 166 York Street, Chester, S.C. 29706; 385-6061 Of.; 377-4540 Res.; Pvt./Com. (Gliders only) F-I Glider.

FRANCES H. MILLER, 702 Woodland Hills, West Columbia, S.C. 29210; 588-2171 Chas., 772-3282 Res.; Pvt./Com., IRA,

PA-23 Series, PA-30, PA-34-200, PA-44-180, BE 55-58, BE-95 Series, C-310 Series, AC-500 Series, F-I, A & I. Cessna 337 Series.

SYLVIA ROTH, 702 Woodland Hills, West Columbia, S.C. 29210; 488-2171 Chas., 772-3282 Res.; ATP, IRA, PA-23, 34, & 44 Series, PA-30, BE-55/58, 95, AC-680 (Ex. Turboprop), 500 & 560 Series, C-310 Series.

ROBERT E. RUMSEY, 13-C Sugar Creek Villas, Greer, S.C. 29651; 879-6000 Of., 879-6212 (Club); Pvt./Com. Airplane, IRA, BE-55/58 & 76, F-I, A & I.

JOHN F. SAVERANCE, 300 Gervais Street, Columbia, S.C. 29201; 758-5661 Of., 776-1151 Res., 776-5121; Pvt./Com., IRA, PA-23 & 30, C-310 & Cessna 336/337 Series. PA-44-180.

JOSEPH PRICE TOMPKINS, 302 Bridgewater Drive, Greenville, S.C. 29615; 298-4121 Of.; 268-5945 Res.; Pvt./Com., IRA, PA-23 Series, PA-44, BE-55/58 Series, BE-95, BE-76.

Automated FSS planned to meet needs of aviation community to the year 2000

Continued from page 1

safely, so he tucks the printed copy in his flight bag for later reference, and, with a few additional instructions to the computer, he files a flight plan.

A hypothetical example, sure, but by no means a flight of fancy because this is the way many general aviation pilots will get flight briefings when the Federal Aviation Administration completes its program to automate its flight service station network in the late 1980s. Reider also will have the option of calling toll free to the flight service station at Anderson County Airport, 217 miles northwest of Charleston, if he needs additional information. But, in most instances, that won't be necessary. In fact, by having direct access to the data base, pilots like Reider will get better briefings than their local FSS now can provide, and they will get these briefings a whole lot faster. The information will be more up-to-date because, in addition to automating the flight service station network, FAA is working to improve the collection and distribution of weather information for pilots.

Specific improvements include a new generation of radars, with special weather detection features, and central weather processors to collect weather radar data, translate it into alphanumeric and graphic format, and speed it to flight service stations and other air traffic facilities. When the data-link feature of the new, improved secondary radar surveillance system is available, pilots in the cockpit will have direct access to the latest weather and flight data as well. All these efforts are just part of a larger, comprehensive FAA program to modernize the facilities and equipment in the National Airspace System to meet the needs of aviation to the year 2000.

Meanwhile, current plans for the FSS network call for consolidating the existing 317 flight service stations into 61 automated facilities by 1991. Stations will be consolidated a few at a time, as automated capabilities are brought on line, to make sure service



is not interrupted.

The present FSS system still provides invaluable service to the general aviation community. The problem is that the system hasn't kept pace with advancements in communications technology or the tremendous growth in the size and complexity of general aviation. As a result, at the busiest FAA locations, it's becoming increasingly difficult to meet the demands for service — efficiently and at a cost pilots can afford.

Even though improvements have been added over the years, specialists for the most part still work with outdated communications equipment and are doing manually what computers for decades have been doing far better — collecting, processing, storing, and displaying data. Tied up with hand processing this routine information, specialists simply don't have time to put together briefings for all the pilots that need them. One of the inevitable results is a recorded message more and more familiar to pilots trying to get through to flight service stations in busy metropolitan areas — "Stand by, all briefers are busy."

Some of the smaller FSSs, by comparison, get hardly any business at all, and it's just not cost effective to keep

them open.

To better understand some of the problems with the current FSS system, let's look at the equipment the specialist has to work with.

When a pilot calls, the specialist must sift through an array of written and graphic materials to put together a briefing that's suited to the pilot's particular needs. The material includes weather reports, notices to airmen (NOTAM), pilot reports, weather charts and other vital flight information. Pertinent information must be culled from this mass of material and mentally arranged in logical sequence. If the pilot wants to file a flight plan, the specialist must copy it down by hand as it's being dictated over the phone. At some facilities, the flight plan must then be manually converted, by the same specialist or someone else in the facility, to telecommunications tape so it can be sent out over the circuit to an en route center or flight service station.

All this takes time and it means annoying delays for pilots. Frustrated, some of them will take off without the information they need to fly safely.

The automated FSS system is designed to cut down on those delays and, at the same time, provide pilots a much better product.

In the first phase of the program, for instance, specialists will get computerized equipment that will automatically retrieve from the computer information pertinent to each particular flight. It will arrange the information in a logical format and display it in alphanumeric on the monitor in front of the specialists — all in a matter of seconds. Moreover, if the pilot files a flight plan, the specialist, instead of copying it by hand, can enter it into the system with a simple keyboard entry and have it automatically transmitted to the appropriate air traffic facilities down the line. And, if the pilot later is overdue at his or her destination,

Continued, back page



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Automated FSS designed to cut delays

Continued from p. 7

the computer will flash a signal on the monitor to alert the specialist.

The second phase will add a display for weather radar charts and other graphics. Later, it will be upgraded to provide the direct access capability for computer terminals.

Besides making life easier for pilots, these improvements will greatly improve the productivity of the flight service specialists. Now a specialist handles from 1,000 to 25,000 flight services per year, depending on the facility. The systemwide average comes to about 14,000 services. With full implementation of automation and consolidation, that national average is expected to jump to more than 20,000 per specialist.

Greater productivity, of course, translates into big savings for the general aviation pilot, who picks up a good share of the tab for these services through user taxes. The projected cumulative cost savings for the Flight Service Modernization Program through 1995 is approximately one billion dollars. In annual operating costs alone, the automated system is estimated to run about half — \$164

million vs. \$346 million — of what it would cost to retain the manual system.

Much of these projected savings will be realized when direct access to the computerized data base is available to pilots and being widely used throughout the United States. One method of direct access, a voice-response system using Touchtone telephones, has been demonstrated successfully in Washington, D.C., and Columbus, Ohio, areas over the last several years, and operational voice-response systems will be available at 25 busy FSS sites, beginning in 1984. Direct access briefings are expected to serve 70 percent of flight service requests by 1995.

Although calling in for a briefing may appear to be innovative, it won't be anything new for most pilots. About 95 percent of the briefings now are provided by telephone rather than personal visits to an FSS.

Communities losing their FSS under the consolidation phase of the program need not worry about losing special local services. Any community which has toll-free telephone access in

the old system will have it in the new. Direction-finding equipment will remain in place at the old sites or be replaced with upgraded units. And, local weather observation service will be maintained, initially through the use of contract weather observers and later by means of a comprehensive network of some 2,000 automated observation systems. This automated equipment is being tested at 14 sites through the summer of 1984.

One change may take a bit of adjustment on the part of some pilots — and that's the business of talking to a computer. But, the fact remains that talking to computers is becoming more and more common in everyday life — in personal banking, just to cite one example. So, it shouldn't be long before most pilots will be as comfortable talking to a computer as they are today dealing with the local FSS.

It's not that computers will ever completely replace people in the FSS system. But, they will help make the system a whole lot better and allow people who operate the system to do what computers can never do — act like human beings. ➔

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